SAVANNAH RIVER BASIN
WATER USE DATA COLLECTION
PRESENTATION OF FINDINGS

Contract No. DACA21-98-D-0019-0047
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Prepared for:

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1.0 INTRODUCTION

This report presents the results of activities undertaken by ZAPATAENGINEERING, P.A. in managing and administrating the water use data collection stage of the Initial Water Allocation Analysis phase of the Savannah River Basin (SRB) Comprehensive Water Resources Study. The work tasks were performed for the Savannah District of the US Army Corps of Engineers (USACE) under contract number DACW21-98-D-0019, Delivery Order 47. The fundamental concept of the scope of work was to collect, validate, and input water use data into a Geographic Information System (GIS) database. The study was done in close coordination with the Savannah District, USACE, and with the states of South Carolina and Georgia.

1.1 PROJECT OBJECTIVES

During the Initial Water Allocation Analysis phase of the study, ZAPATAENGINEERING pursued two primary objectives, as described in the USACE document "Project Study Plan for the SRB in Georgia, South Carolina, and North Carolina." The first objective was to convene stakeholder groups and identify participants (stakeholders) for each group. The second was to develop stakeholder-group estimates of current and projected water use.

The goal of the work presented in this report, consistent with its title, is to collect data from users of the water resources of the SRB. The purpose of the data collection is to identify and project future water withdrawals and returns, and consumptive and non-consumptive water uses. A subsequent phase of study will use these and other data as input to modeling tools to evaluate and quantify current and future water resources needs of the basin.

1.2 PROJECT APPROACH

Details of ZAPATAENGINEERING's approach are described in detail in the "Water Use Data Collection Communications Plan," prepared by ZAPATAENGINEERING for the USACE. The mission of this data collection, as described in the plan, is to evaluate the current and future water needs of the stakeholders who rely on the SRB to facilitate planning for those future needs.

In developing this study and presenting the resulting database, it is understood that data collection does not end with the publication of this report. As information from stakeholders is added or refined, it can be added to the database.

1.2.1 Objective 1 – Identification of Stakeholders

ZAPATAENGINEERING developed the SRB stakeholder list, included as Appendix B in the "Savannah River Basin Water Use Collection Communications Plan" (ZAPATA ENGINEERING 2002), by building on existing lists prepared and published by the Savannah District, other federal and state agencies, as well as civic and industrial organizations with interests in the SRB. The Stakeholder List contains contact information for water-users identified through document research and public outreach efforts. For the purpose of this data collection effort, stakeholders are defined as "entities and individuals who have a vested interest in the SRB." This Stakeholder List is included as part of the electronic database deliverable. The list was derived from several sources including:

- Stakeholder lists from previous studies, obtained from the Savannah District, USACE
- Individuals or businesses that have permits to withdraw from or discharge to waterways within the SRB. Lists of permitted withdrawals and discharges were obtained from the states of South Carolina and Georgia.
- Lists of attendees at "Water Summit" meetings regarding the SRB held in South Carolina and Georgia. ZAPATAENGINEERING made an informational presentation at the Georgia Water Conference on April 24, 2003. ZAPATAENGINEERING hosted and made presentations at public meetings on September 16, 17 and 18, 2003. The announcement of those public meetings and minutes of the meetings are included herein as Attachment 2. ZAPATAENGINEERING addressed the Anderson, South Carolina Chamber of Commerce on October 21, 2003.
- Telephone communications with economic development authorities, chambers of commerce and water utilities within the SRB.

Stakeholders, once identified, were assigned to five major groups, or categories, as follows:

- Industrial and Municipal users
- Agricultural users
- Recreational users, homeowners and property owners
- Hydroelectric power entities
- Ecological interest groups.

A list of the SRB stakeholders who provided input, survey response, or otherwise participated in the effort is provided as a separate table in the electronic data set.

1.2.2 Objective 2 – Data Solicitation

ZAPATAENGINEERING initiated data collection from the four stakeholder groups listed below via a form letter and survey questionnaire. The letter provided background information on the study and requested appropriate data from the user. Questionnaires were developed for each of the stakeholder groups. Each questionnaire was specifically tailored to address the unique needs and information resources of the target group.

- industrial/municipal users
- agricultural users
- lake-area residents
- recreational users (lakes and river)
- commercial hydroelectric power operators.

Each survey questionnaire with its accompanying letter was developed by ZAPATAENGINEERING in coordination with the states of South Carolina and Georgia and the Savannah District of the USACE. Input from stakeholders was sought and included in the process of developing the surveys. ZAPATAENGINEERING consulted with representatives of Friends of the SRB, the Lake Hartwell Association, and several industrial facilities throughout the basin. Before distribution to the public, each document was reviewed and approved for distribution by the Government's Office of Management and Budget (OMB), Department of Defense, Directorate for Information

Operations and Reports under OMB Control Number 0710-0001. Copies of OMB-approved surveys and letters are in Attachment 1.

Early in the project, ZAPATAENGINEERING established a toll-free telephone number for communication between the project team, stakeholders and the general public. A project-specific email account was established to handle incoming electronic communications and data from stakeholders, as well as any comments and questions from the general public. ZAPATAENGINEERING project personnel responded to each telephone call and email communication within two business days.

During the first week of June 2003, ZAPATAENGINEERING placed public announcements in several major newspapers with readerships in the SRB area. Announcements were published in the Augusta Chronicle, the Greenville News, the Savannah Morning News, the Hartwell Sun, the Aiken Standard, the Elberton Star, and the Toccoa Record. These public announcements were developed by ZAPATAENGINEERING in consultation with the USACE and were reviewed and approved prior to publication by the Savannah District's Public Affairs Office. The primary purpose of these public announcements was to make the project known to the general public throughout the SRB, and to solicit input for the data collection process. The public announcement copy is in Attachment 3. Based on information provided by the newspapers, the total, combined circulation of the newspapers in which the public announcements appeared is approximately 450,000. ZAPATAENGINEERING received and responded to about two-dozen telephone calls from agricultural and residential stakeholders following the ads.

As result of the public outreach effort, the Lincoln Journel and the McCormick Messenger each published articles on the SRB Comprehensive Study with a focus on the data collection effort. The articles included copies of the lake-area-residents recreational survey and contact information to submit a survey or request additional information about the study.

Three public meetings were held to serve as forums for sharing the current status of data-collection efforts and to encourage participation by SRB stakeholders, particularly Agricultural, Industrial and Municipal Stakeholders. ZAPATAENGINEERING hosted these meetings in Savannah, Georgia, in North Augusta, South Carolina, and in Anderson, South Carolina, on September 16, 17 and 18, 2003, respectively (see Attachment 2). ZAPATAENGINEERING provided a similarly structured presentation to the Anderson, South Carolina Chamber of Commerce on October 21, 2003.

2.0 STAKEHOLDER IDENTIFICATION AND CONTACT

2.1 INDUSTRY/MUNICIPALITY

ZAPATAENGINEERING initiated data collection from the industry/municipality group via the form letter and survey questionnaire in Attachment 1. The letter provided background information on the study and requested appropriate data.

Approximately 285 "Water Release/Water Intake Surveys" were distributed by regular U.S. mail. Information and data requested from members of the industry/municipality group included the following:

- Business type
- Surface-water intake elevation
- Monthly minimum flows required for conformance with National Pollution Discharge Elimination System (NPDES) permitting, if applicable
- Seasonal average daily and weekly withdrawal and discharge volumes
- Annual water consumption
- Projections of future annual water needs through 2050
- Details of withdrawals, if available.

ZAPATAENGINEERING followed up the mailing with telephone calls to 77 industry/municipality points of contact. Several new points of contact were identified, and ZAPATAENGINEERING sent questionnaires to them. Some 40 to 50 surveys were mailed in this follow-up, mostly to new points of contact, but some to newly identified stakeholders. In the months since then, there have been numerous telephone calls to attempt to elicit responses from stakeholders.

2.2 AGRICULTURE

ZAPATAENGINEERING initiated data collection from the agricultural user group via the form letter and survey questionnaire in Attachment 1. 126 copies of the "Agricultural Water Release/Water Intake Survey" were distributed by regular U.S. mail. Information and data requested from members of this stakeholder group included the following:

- Business type, location, and size
- Monthly needed (planned) and actual withdrawal volumes
- Surface withdrawal and/or discharge permits
- Specific water bodies used for withdrawal/discharge
- Minimum flows required for conformance with NPDES permitting, if applicable
- Location and elevation of intake(s)
- Projections of future water use and water needs.

ZAPATAENGINEERING received six completed responses from this stakeholder group.

2.3 RECREATION AND HOMEOWNER

2.3.1 Public Recreational User Group

Survey questionnaires were distributed through the Georgia State Parks system and the South Carolina Department of Parks and Recreation and through posting at several marinas, tackle shops, and community stores throughout the SRB. Representatives of ZAPATAENGINEERING visited nine state parks between May 6 and May 8, 2003, to coordinate distribution of the surveys at these and nearby public locations. Approximately 1,600 questionnaires were distributed; 150 to 200 were left at each state park location. In coordination with park personnel, the surveys were left at each park office in a display box if available along with pencils, pre-addressed envelopes, and a laminated cover letter explaining the purpose and goal of the study. Before leaving each location, the ZAPATAENGINEERING representative requested that the surveys be placed in a visible location and be made available to the public when checking in to the park. Park attendants indicated whether the questionnaires would be placed in cabins, handed out, or

kept at the park office. The cover letter, included in Attachment 1, stated clearly that the respondent could either mail the document to ZAPATAENGINEERING in the envelope provided, or simply return it to the park attendant. ZAPATAENGINEERING visited the following nine of the 12 parks that participated in the data collection effort:

- Calhoun Falls State Recreation Park
- Lake Hartwell State Recreation Area
- Bobby Brown State Park
- Elijah Clark State Park
- Hart State Park
- Mistletoe State Park
- Richard B. Russell State Park
- Tugaloo State Park
- Saddlers Creek Sate Park.

ZAPATAENGINEERING re-visited each park office during the survey period to check on the status of the surveys and replenished materials as necessary. The ZAPATAENGINEERING representative also responded to questions received by park attendants.

Representatives of Friends of the SRB in support of this effort visited the following state parks and distributed approximately 250 questionnaires:

- Baker Creek State Park
- Hickory Knob State Resort Park
- Hamilton Branch Recreation Area.

We understand that Friends of the SRB also distributed recreational surveys to several marinas and village stores in the Lake Thurmond area. Therefore, approximately 1,850 surveys were distributed through numerous locations within the basin to allow access to recreational stakeholders.

ZAPATAENGINEERING requested that the parks forward all collected surveys to our Charlotte, North Carolina office during the second week of June, 2003. Forty completed surveys were received from the state parks and individuals as result of this effort.

2.3.2 Resident Homeowner Groups

ZAPATAENGINEERING surveyed Lake Area Residents in the SRB by distributing questionnaires via U.S. mail and through the support of two organizations; i.e., Friends of the Savannah River Basin and the Lake Hartwell Association. Each of these organizations has more than 1,000 members and distributed surveys to their membership through several media, such as email, regular U.S. mail, newsletters, or in person. Three separate surveys were prepared and distributed; those were to area residents of Lakes Hartwell, Russell, and Thurmond (see Attachment 1). Approximately 2,000 questionnaires were mailed or otherwise provided to those residents by ZAPATAENGINEERING or these supporting groups. 312 completed surveys were returned to ZAPATAENGINEERING.

2.4 HYDROELECTRIC POWER

ZAPATAENGINEERING contacted four operators of hydroelectric power facilities regarding the SRB Study. They were Duke Energy, South Carolina Electric and Gas (SCE&G), Georgia Power Company, and the Southeastern Power Administration (SEPA). Duke Energy, SCE&G and Georgia Power operate three, one and six hydroelectric plants, respectively, within the SRB. SEPA markets, sells and distributes power generated by the USACE-operated hydroelectric facilities at the Hartwell, Richard B. Russell and J. Strom Thurmond Dams.

Each of these operators received a customized version of the Industry/Municipality questionnaire requesting information regarding the volume of water withdrawn from or released to the Savannah River or one of its tributaries (see Attachment 1). Information and data requested included:

- Minimum river flows required for "useable" power generation
- Seasonal average daily volumes released through the dam (if applicable) and/or to the river (including tributaries)
- Projections of annual release volumes through 2050
- Details of weekly releases for past several years.

2.5 ECOLOGY

A joint effort by USACE, Savannah District and the Nature Conversancy produced the ecological flow prescriptions for the lower SRB.

3.0 FINDINGS

3.1 MUNICIPAL AND INDUSTRIAL GROUPS

Initial contact with approximately 285 Municipal and Industrial stakeholders was made via U.S. Mail in late April, 2003. Twenty-seven responses were received as result of this initial mailing. Seventy-seven M&I stakeholders (those who are permitted to withdraw water from the SRB and/or those whose permits indicated large discharge volumes) that had not responded by the end of June were again contacted in July 2003 by telephone to verify correct address, change of business location or name, or identify new contact persons, as appropriate. This telephone contact resulted in the return of three additional surveys. In addition, three businesses and one municipality stated that the water-use surveys were not applicable to their operations because there were no withdrawal or discharge activities to or from the SRB as part of their operations.

Three stakeholder meetings were conducted in September 2003 to update M&I stakeholders on the status of the data gathering effort and to encourage participation. As a result of these meetings, two additional surveys were received. A summary of the M&I input by river segment is discussed below. The following subsections provide summaries of the ten segments of the SRB as defined by the USGS for their purpose of calculating the natural in-flows for the basin. The SRB with river segments is illustrated on Figure 3-1.

3.1.1 Segment S1

Segment S1 (Figure 3-2) encompasses the SRB from the mouth of the Savannah River to the northwestern portion of Effingham County, Georgia and the northwestern portion of Jasper County, South Carolina. Four of the 14 M&I facilities permitted to withdraw from surface waters within segment S1 provided a response to the survey, and 11 of the 50 M&I facilities permitted to discharge to the surface waters within segment S1 responded. Based on the data in the completed surveys, approximately 443.98 mgd is the average daily volume withdrawn in this basin segment by the four facilities. Based on the responses provided by M&I stakeholders, 535.7 mgd are discharged into segment S1.

3.1.2 Segment S2

Segment S2 (Figure 3-3) encompasses the SRB from the northwestern corner of Jasper County, South Carolina and the northeastern corner of Effingham County, Georgia through portions of Allendale County, South Carolina and up Brier Creek on the Georgia side of the basin to Columbia, McDuffie, and Warren Counties. None of the five M&I facilities permitted to withdraw surface waters from the SRB within segment S2 provided a survey response. All of these facilities are permitted to withdraw from portions Brier or Reedy Creeks, with one intake each located in Warren, McDuffie, Glasscock, Jefferson, and Burke Counties in Georgia.

One of the 12 M&I facilities permitted to discharge to the surface waters of the SRB within segment S2 responded with no data. All of the l2 discharges are to Brier Creek or smaller tributaries.

3.1.3 Segment S3

Segment S3 (Figure 3-3) encompasses the Savannah River and associated tributaries between the northwestern portions of Allendale County, South Carolina and the eastern half of Screven County, Georgia, and Barnwell County, South Carolina and Burke County, Georgia. A significant portion of the Department of Energy's Savannah River Site (SRS) is located within this segment in Barnwell County. The SRS withdraws a daily average of 11.66 mgd through one intake from surface waters and discharges a daily average of 10.4 mgd through 27 permitted locations. There are four additional discharge points within the South Carolina portion of segment S3, which are owned/operated by two stakeholder entities not associated with the SRS. There are six discharge locations in the Georgia portion of segment S3. Responses for these other discharges were not received.

3.1.4 Segment S4

Segment S4 (Figure 3-3) encompasses the Savannah River and associated tributaries between the southwestern portion of Aiken County, South Carolina, the northeastern portion of Burke, County, Georgia, and the southern part of Richmond County, Georgia. The lone M&I facility permitted to withdraw surface waters from the SRB within segment S4 provided a survey response and withdraws a daily average of 59.9 mgd.

Sixteen of the 33 M&I facilities permitted to discharge to the surface waters of the SRB within segment S4 provided survey responses indicating an average daily discharge of 57.7 mgd.

3.1.5 Segment S5

Segment S5 (Figure 3-4) encompasses the Savannah River and associated tributaries from a few miles east of I-520 near Augusta, Georgia to the J. Strom Thurmond Dam in Columbia County, Georgia and Edgefield County, South Carolina. Several major tributaries within segment S5 run through McCormick, Saluda, and Greenwood Counties in South Carolina. Five of the 12 M&I facilities permitted to withdraw surface waters from the SRB within segment S5 provided a survey response indicating an average withdrawal of 44.9 mgd from these 12 locations. It should be noted that three industrial facilities in Augusta, GA share one intake location between their respective operations. Twelve of the 105 M&I facilities permitted to discharge to the surface waters of the SRB within segment S5 provided a survey response. The 105 discharge facilities are owned/operated by 34 entities.

Based on the data provided by the entities that withdraw from segment S5 (42% of users), approximately 38.7 mgd is the average daily volume withdrawn in this basin segment.

Based on the responses provided by M&I stakeholders, 21.8 mgd are discharged into segment S5 by those 12 discharge facilities owned/operated by six entities.

3.1.6 Segment S6

Segment S6 (Figure 3-5) encompasses the Lake Thurmond Reservoir and associated tributaries in Columbia, McDuffie, Warren, Taliaferro, Greene, Olgethorpe, Wilkes, Lincoln, Elbert, Madison, Franklin, Banks and Stephens Counties in Georgia, and McCormick and Abbeville Counties in South Carolina. One of the 13 M&I facilities permitted to withdraw from the SRB within segment S6 provided responses to survey requests reflecting a daily average withdrawal of 0.62 mgd.

Two of the 74 M&I facilities permitted to discharge to the surface waters of the SRB within segment S6 provided a survey response. These 74 discharge facilities are owned/operated by 39 entities. Based on the responses provided by M&I stakeholders, 0.3 mgd are discharged into segment S6 by those providing responses.

3.1.7 Segment S7

Segment S7 (Figure 3-5) encompasses the Lake Russell Reservoir and associated tributaries in Elbert and Hart Counties in Georgia and Abbeville and Anderson Counties in South Carolina. One of six M&I facilities permitted to withdraw surface waters from the SRB within segment S7 provided a survey response, reporting a withdrawal of 2.7 mgd. None of the 73 M&I facilities permitted to discharge to the surface waters of the SRB within segment S7 provided a survey response.

3.1.8 Segment S8

Segment S8 (Figure 3-6) encompasses the Hartwell Lake and associated tributaries located in Hart, Franklin, Stephens, Habersham and Rabun Counties, Georgia, Anderson, Pickens and Oconee Counties in South Carolina, and Macon and Jackson Counties in North Carolina. One of the 13 M&I facilities permitted to withdraw surface waters from the SRB within segment S8 provided a survey response reflecting a daily average withdrawal of 1.6 mgd. Five of the 182 M&I facilities permitted to discharge to the surface waters of the SRB within segment S8

provided a survey response indicating and average daily discharge of 1.0 mgd. 78 entities own/operate the 182 discharge facilities within this segment.

3.1.9 Segment S9

All of segment S9 (Figure 3-6) lies within Oconee and Pickens Counties, South Carolina. One of the three M&I facilities permitted to withdraw surface waters from the SRB within segment S9 provided a survey response, and reported a withdrawal of 27.5 mgd.

Twelve entities own/operate 29 permitted discharge points with segment S9. None of these entities provided a response to the request for data.

3.1.10 Segment S10

Segment S10 (Figure 3-6) lies mostly within Oconee and Pickens Counties, South Carolina, and Transylvania and Jackson Counties, North Carolina. Two entities own/operate four permitted discharge points within segment S10. Neither of these entities provided a response to the request for data related to discharge volume. There is no permitted or reported withdrawal from this segment.

3.2 AGRICULTURAL STAKEHOLDER GROUPS

Six responses were received of 126 surveys mailed to permitted agricultural stakeholders. Water demand for agriculture depends upon several variables, including crop selection, soil type, best management, irrigated acreage, climate conditions, etc. Water use within the basin reflects the influence of those variables. Data submitted by the State of Georgia provided information for 370 withdrawal permits for agricultural use. Current acreage in the Georgia portion of the SRB that is irrigated by surface water is estimated at 28,649 acres, according to data provided by the Georgia Department of Natural Resources. Although South Carolina does not issue permits for agricultural water withdrawals, there are an estimated 110,000 acres of land used for agricultural purposes within the SRB in South Carolina, according to spatial land use data provided by the State of South Carolina.

3.3 RECREATIONAL AND HOMEOWNER STAKEHOLDERS

3.3.1 Recreational use among the general public

Recreational user's input was primarily through the polling of visitors within the State Park System. Select statistics for the 59 surveys returned are summarized as follows:

- The annual average number of trips taken to the SRB Lakes during the past 12 months was 15
- Lakes most frequently visited were Hartwell (48% of the responses) and Thurmond (28%)
- Potential increase in the number of lake trips if drought conditions had not existed was 57%
- How do users alter their recreational plans during periods of low water?

    a. 38% would continue their plans to visit the same lake despite low water
    b. 20% would go to a different lake
    c. 20% would not make a water-based recreational trip
    d. Others indicated that they (a) would go to the same lake but use a different access point, (b) would go to the beach for water recreation, or (c) did not specify.

Respondents were asked what minimum water level they felt necessary for optimal recreational use. The average answer among 34 respondents (five did not answer) was 4.26 feet below normal. Respondents were asked to provide a level below which their ability to use the lakes would be seriously impacted. The average response was a drop to 7.5 feet below full lake level.

3.3.2 Recreational use among homeowners

312 surveys were received by ZAPATAENGINEERING and, based on the returns, 262 respondents are homeowners, with 15 of these homeowners living in the SRB on a seasonal basis. Other findings from those surveyed:

- The most popular reasons people chose to live in the SRB area are recreation (47%) and retirement (28%).
- When asked about the most important reasons for having full lake-level conditions, 37% of the respondents said boating, 30% answered safety, and 13% answered accessibility.

3.4 HYDROELECTRIC POWER

ZAPATAENGINEERING received data from Duke Energy for its projects located in the upper basin on the Seneca River. These data for Bad Creek, Jocassee and Koewee Hydroelectric Plants are in the database that accompanies this report. Data for the remaining commercial hydroelectric facilities located within the SRB have not been received.

As indicated in Section 2.4 above, SEPA markets and distributes power generated at the Lake Hartwell, Russell and Thurmond hydroelectric facilities. SEPA provided monthly power-generation quantities and related them to equivalent acre-feet of water at the three lakes. Those data are included in the GIS database. SEPA is sensitive to declines in lake levels, because they must replace that associated power-generation capacity, most likely at a significantly higher cost. Based on the drought of 1981, minimum lake levels are elevation 642.4 ft for Hartwell, 474.5 ft for Russell and 317.6 ft for Thurmond, these latter two simulated because Russell Dam was not completed at the time.

4.0 CONCLUSIONS

This effort to collect water-use data had mixed success. For the Industry/Municipality stakeholders, more user information was received from those in the lower part of the SRB than from those in the upper part of the basin, although records for both areas are incomplete. In some cases there are large differences between the volumes reported to be withdrawn and discharged versus permitted volumes. Reported values are summarized in Section 3.1, above. Those reported values and the permitted values are included in the accompanying database.

Through state-provided permit information, agricultural withdrawals are reasonably well documented for the Georgia side of the Savannah River. Agricultural water use for the South Carolina side must be estimated at this time based on agricultural acreage.

The most responsive stakeholders were the recreational users and homeowners. Based on the results provided in the database and summarized above, their preferences and needs are well documented.

Unfortunately, some key power generators did not respond to repeated requests for information. SEPA outlined its needs and sensitivities to decreases in lake levels that are not programmed into its long-range forecast.

While less than ideal, there should be sufficient data to begin modeling, while continuing to acquire water-use information from previously non-responsive stakeholders.

FIGURES


Macon
Jackson
Transylvania
Clay
S10
Towns
Rabun
Pickens
S9
Oconee
S8
Habersham
Stephens
Anderson
Banks
Franklin
Hart
S7
Abbeville
Greenwood
Jackson
Madison
Elbert
Saluda
Clarke
McCormick
Oglethorpe
S6
Wilkes
Lincoln
Edgefield
Augusta
S5
Greene
Taliaferro
Columbia
Aiken
McDuffie
Warren
Richmond
S4
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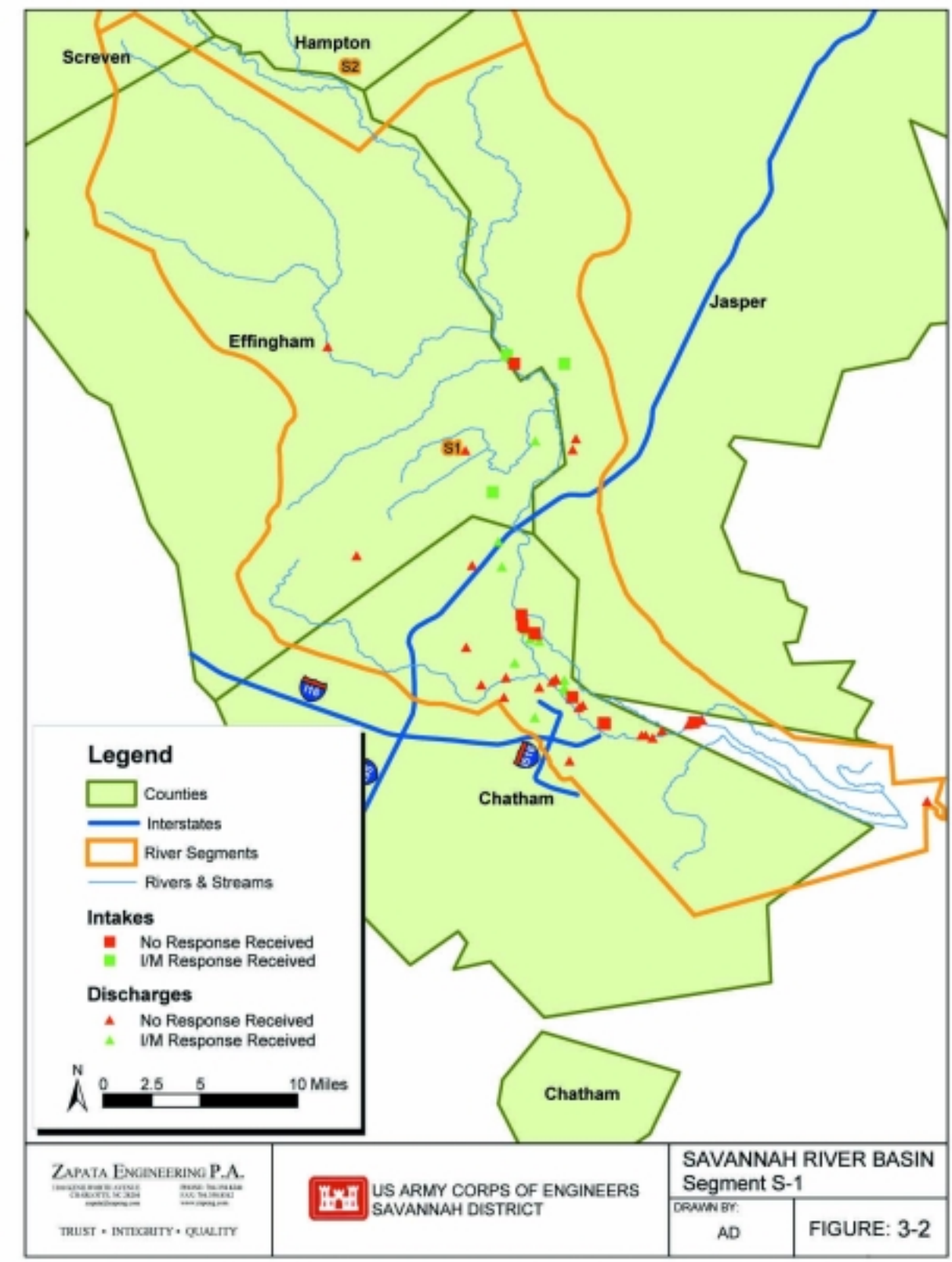
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FIGURE: 3-2

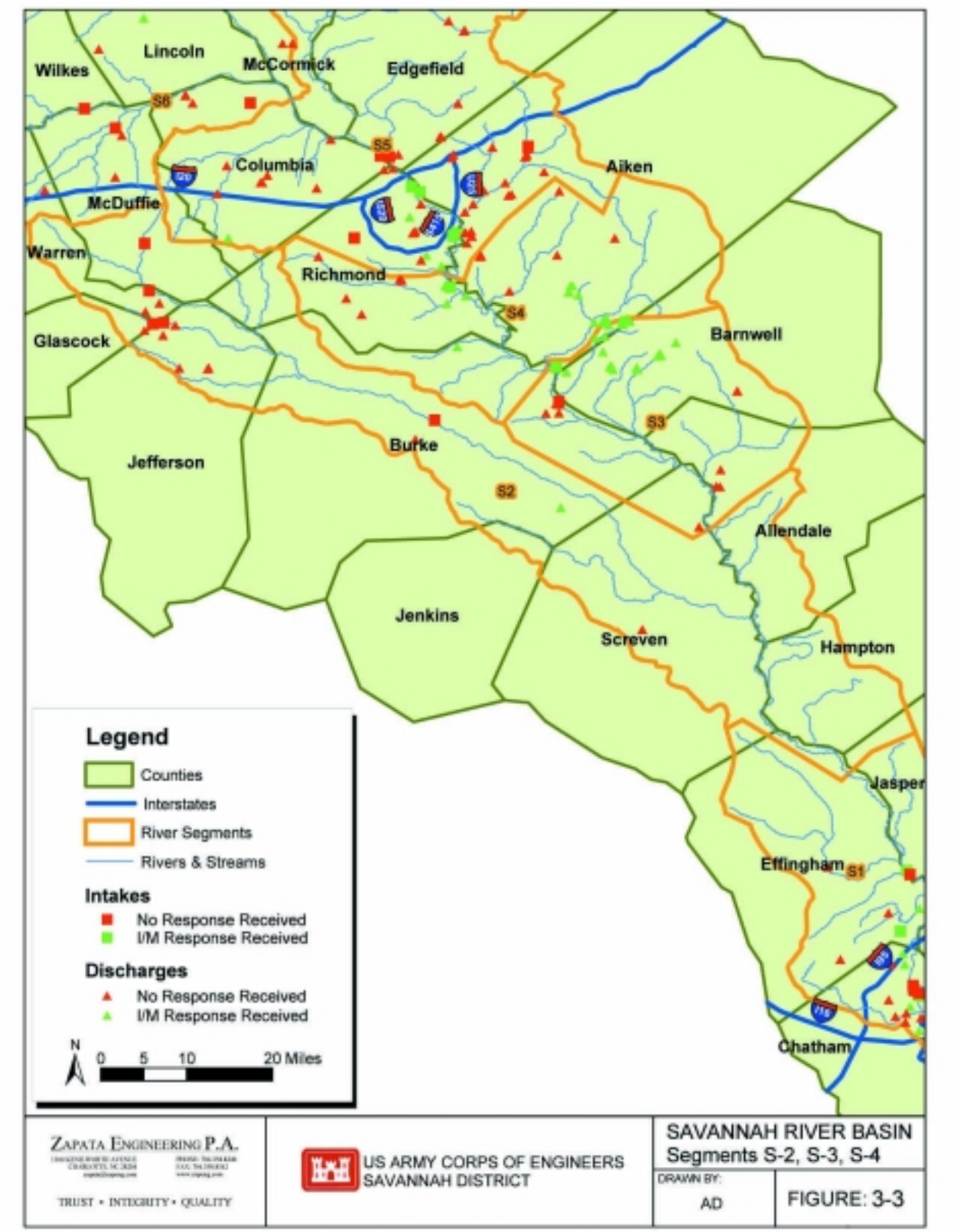
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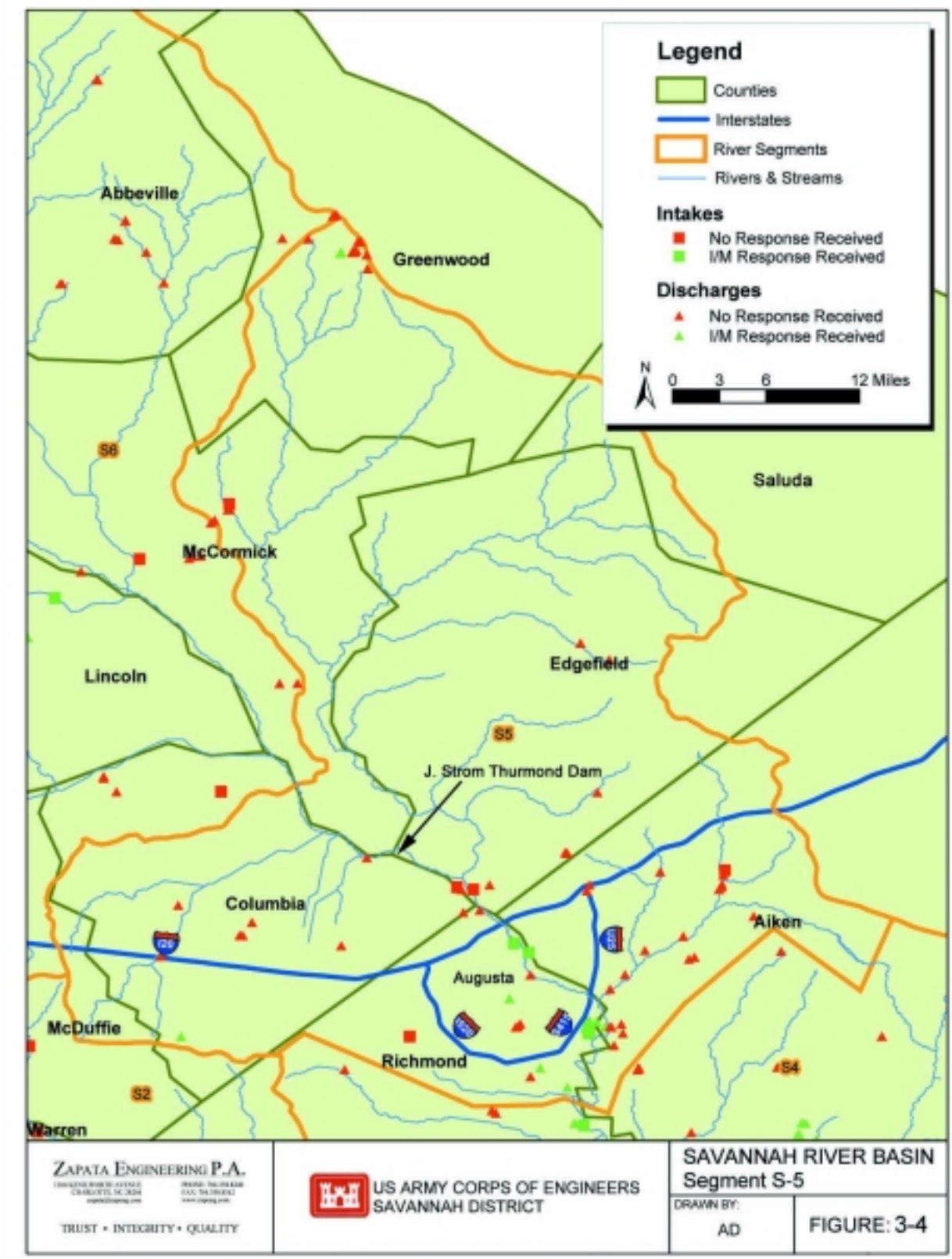
FIGURE: 3-3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Aiken
Augusta
McDuffie
Richmond
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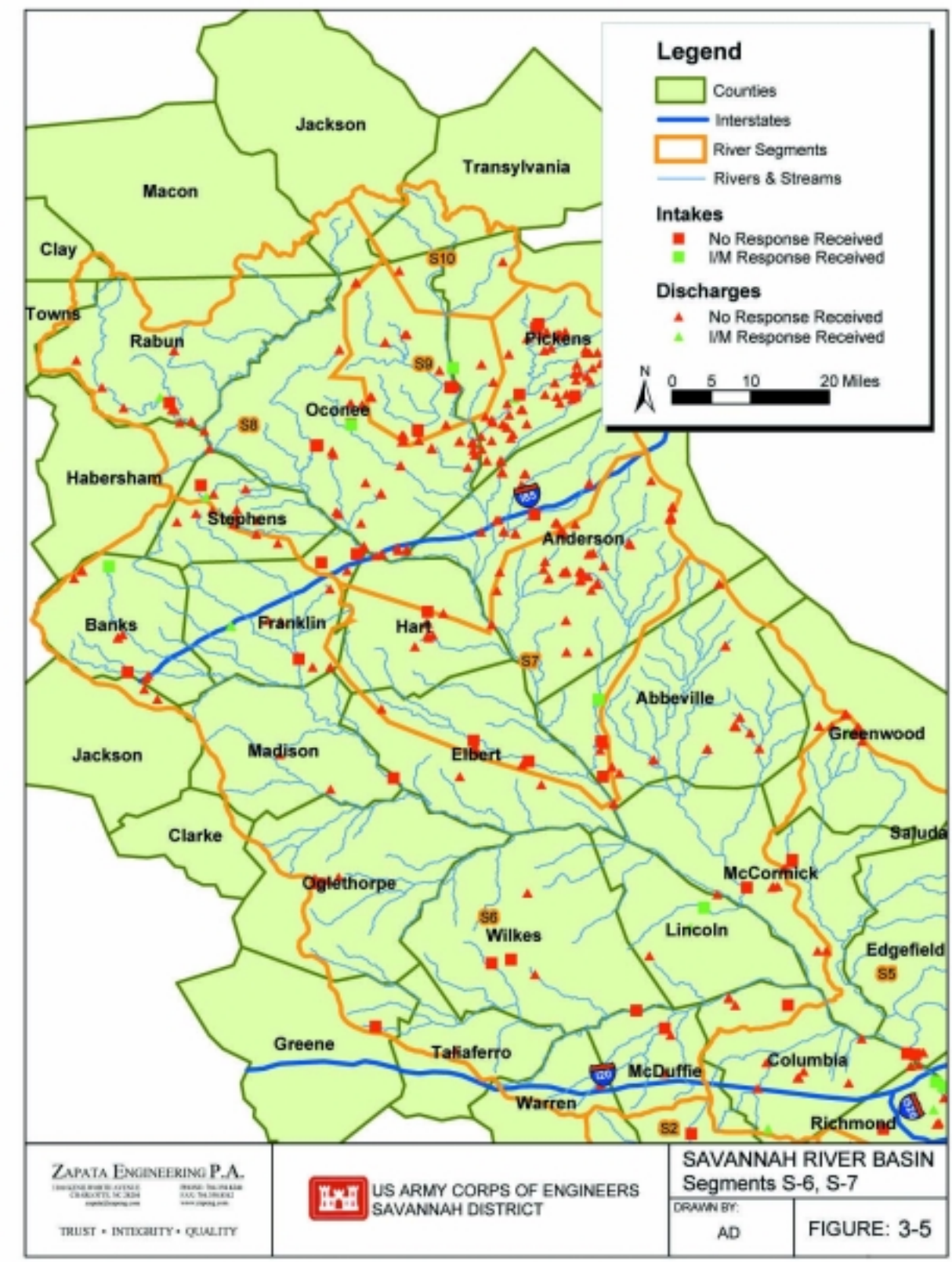
FIGURE: 3-4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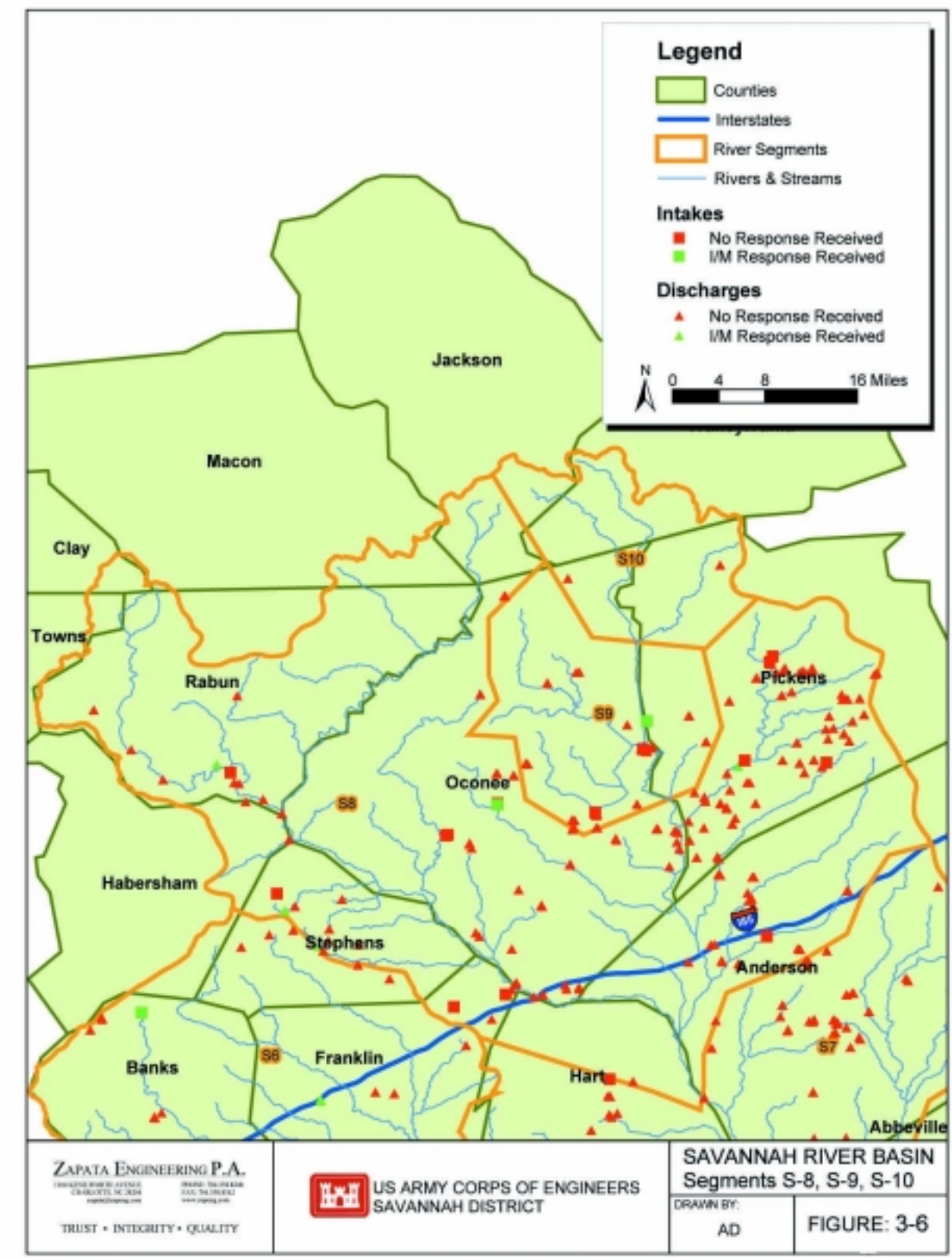
S10
S9
S8
S7
S6
S5
S2
ZAPATA ENGINEERING P.A.
TRUST • INTEGRITY • QUALITY
US ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT
SAVANNAH RIVER BASIN
Segments S-6, S-7
DRAWN BY:
AD
FIGURE: 3-5


Legend
Counties
Interstates
River Segments
Rivers & Streams
Intakes
No Response Received
I/M Response Received
Discharges
No Response Received
I/M Response Received
N
0 4 8 16 Miles
Jackson
Macon
Clay
Towns
Rabun
Habersham
Stephens
Banks
Franklin
Hart
Oconee
Pickens
Anderson
Abbeville
S6
S7
S8
S9
S10
ZAPATA ENGINEERING P.A.
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SAVANNAH DISTRICT
SAVANNAH RIVER BASIN
Segments S-8, S-9, S-10
DRAWN BY:
AD
FIGURE: 3-6

ATTACHMENT 1

COPIES OF OMB-APPROVED SURVEYS AND COVER LETTERS

ATTACHMENT 2

RECORD OF PUBLIC MEETINGS

ATTACHMENT 3

NEWS MEDIA PUBLIC ANNOUNCEMENTS